### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.

Rulemaking 06-03-004 (Filed March 2, 2006)

# OPENING COMMENTS OF ENERGY INNOVATIONS, INC. ON THE CPUC ENERGY DIVISION STAFF PROPOSAL FOR CALIFORNIA SOLAR INITIATIVE DESIGN AND ADMINISTRATION 2007-2016

March 16, 2006

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Energy Innovations<sup>1</sup> respectfully submits these opening comments on ALJ Duda's Ruling Requesting Comment on the Staff Proposal for Performance Based Incentives and Other Elements of the California Solar Initiative.

Because of the breadth of the staff proposal and the level of detail required to respond thoughtfully to its myriad recommendations, Energy Innovations has joined with other industry groups in filing a joint set of comments on many of its critical aspects. As a result, we will not duplicate those efforts here. But given our unique position among the parties to this proceeding as a developer, manufacturer and installer of concentrating PV systems for grid-tied rooftop applications, we felt it important to weigh in on the specific portions of the staff proposal about which we have direct, relevant market experience. These brief comments will focus on those issues.

We fully appreciate the intent of the Commission, well represented in the staff proposal, to encourage deployment of the most solar energy capacity and production

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<sup>&</sup>lt;sup>1</sup> Energy Innovations, Inc., is developing a low-cost solar concentrator for use on grid-tied commercial buildings. Its wholly owned subsidiary, EI Solutions, is a California solar power systems integrator with offices in San Rafael, San Diego and Pasadena. EI Solutions serves the entire California market for grid-connected solar power systems across all of the IOU territories. Energy Innovations is a member of PVNow, also a party to this proceeding.

for the least cost to ratepayers. In fact, our interests are completely aligned – the entire motivation for starting our company was to create more cost-effective alternatives to the current crop of renewable energy technologies. By promoting solar installations through a declining rebate program, your initiative stimulates the formation of companies like ours and encourages us to move aggressively to commercialize technologies waiting in the wings to serve the needs of ratepayers for more affordable green energy solutions.

Many of the recommendations in the staff report will serve these objectives well, and we applaud the considerable amount of work that obviously went into the document. Throughout the proposal, however, the staff has embedded recommendations that, while well meaning, have the unintended consequence of discouraging innovation both in terms of new technologies that might drive down the cost of solar and refinements on site that might maximize energy production, regardless of technology.

First among these is a proposal to decrease, beginning in 2009, the incentive paid to concentrating solar power (CSP) technologies at a 50% greater rate than traditional PV (15% vs. 10%). The justification for this proposal is that CSP systems "can have higher efficiencies than flat-panel PV," generate more energy over the course of the day because they typically employ tracking, and should cost less to manufacture because they use less of the expensive part of a flat-panel system, the silicon-based PV material<sup>2</sup>. The net effect of these characteristics, the staff contends, is that CSP systems should cost less and therefore deserve less of a subsidy.

In leaping from the set of observations to the conclusion about subsidies, the staff unfortunately ignores the realities of how markets receive and adopt new technologies. Because CSP has less of a track record than traditional systems, customers demand a discount over market prices for PV in order to get them over the perceived risk of being an early adopter of new technology – even with the iron-clad

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<sup>&</sup>lt;sup>2</sup> CPUC Energy Division Staff Proposal for California Solar Initiative Design and Administration 2007-2016, page 30.

guarantees we also have to offer on energy production in order to get them to consider such new technologies to begin with. By recommending a different incentive for a technology that, on the surface at least, might be offered at a lower price per watt than PV, you are effectively neutralizing the price differential between these two approaches, thereby inherently favoring the risk-free incumbent technologies. However inadvertent this effect may be, such a policy will discourage customers from adopting innovations that will ultimately serve the market and the ratepayers through increased competition, which drives down prices for all technologies.

In a similar vein, the staff has recommended that total customer incentives – combining the CSI incentive with the benefits of the federal tax credit – not exceed 50% of total installed system costs<sup>3</sup>. While there might be some emotional appeal to this type of limitation, the Commission tried this approach in the Self-Generation Incentive Program (SGIP) and ultimately discarded it. SGIP experience has amply demonstrated that such limitations provide market disincentives to lower prices below the point that would trigger the cap. Given the proposed annual decreases in the incentive levels, it is highly unlikely that technology innovations would cause prices to drop so dramatically that the 50% cap would ever be reached during the course of the CSI. However, adopting this restriction would again put the Commission on record as discouraging innovation and competition that would push prices down more quickly, and we recommend eliminating this provision from the final set of recommendations.

Finally, the staff recommends that performance-based incentive (PBI) payments, where applicable, be limited to 110% of anticipated energy output of installed systems<sup>4</sup>. While we appreciate the staff's motivation to provide constraints that would guard against budget overruns, this restriction again has the effect of discouraging technologies and on-site installation and operational adjustments that would maximize energy production, in direct conflict with the Commission's overall objective of increasing the contribution from solar to the State's peak energy needs. In

<sup>&</sup>lt;sup>3</sup> Ibid. page 13.

<sup>&</sup>lt;sup>4</sup> Ibid. page 15.

this case as well, we recommend that the Commission reject this approach as unnecessary and ultimately counter-productive.

In summary, we commend the staff for an ambitious and thoughtful proposal, but we encourage the Commission to remain consistent in its support for innovations that would serve to maximize the amount of solar energy delivered to California at the lowest possible cost.

Respectfully submitted,

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#### **CERTIFICATE OF SERVICE**

I certify that I have served a true copy of the document

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to all known parties to R.06-03-004 via email to those listed with email on the CPUC service website and via US Mail to those without email service.

Executed on March 16, 2006 at Pasadena, California.

STEVE CHADIMA

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